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1986 Survey of Aviation Business Operators: Their Views of FAA Airworthiness Inspectors

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16. Abstract

A nationwide survey of 8,854 aviation business operators (users) was conducted to assess their perceptions of, and satisfaction with, the performance of the agency's avionic and maintenance airworthiness inspectors (AWIs). Results are based on returns received from 45% of the overall sample. User ratings on 21 items were analyzed and comparisons were made for each FAA region, type of aviation business activity, and FAA district office within each region. A criterion based on other research concerning consumer satisfaction with services was used to identify positive aspects of AWI performance and areas of performance in need of improvement. Overall satisfaction with AWI performance was fully acceptable and within the range of levels reported in the literature for higher ranking professional/technical services. Users felt very positively about AWI knowledge of FAA regulations and policies, AWI courtesy, and their thoroughness. Areas that could be targeted for improvement included: the consistency and clarity of the technical interpretations, the frequency of visits, and reliance on AWIs for counseling in either regulatory or technical areas. Written comments provided by respondents were placed in general information (5.5%), favorable (24.1%), and unfavorable (70.1%) categories. Comments that indicated shortcomings focused on the same areas that received low item ratings. These analyses will provide FAA management with an opportunity to pinpoint high- and low-rated facilities and determine what features of the facilities/inspectors/procedures differentiate the less from the more successful. Corrective action plans based on the data can then be devised and implemented.

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1986 SURVEY OF AVIATION BUSINESS OPERATORS: THEIR VIEWS OF FAA AIRWORTHINESS INSPECTORS

Within the past two decades, the development and utilization of consumer surveys to assess customer/consumer/client satisfaction with products and services have increased significantly. Information from these surveys has assisted management in modifying, improving, or developing products and services. During 1985, the FAA Administrator, Admiral Donald Engen, requested that information be gathered concerning the perceptions by aviation business operators (users) of the quality and performance of avionics and maintenance airworthiness safety inspectors (AWIs) throughout the entire agency. As a result, a questionnaire entitled "FAA Survey of Users: Airworthiness Inspectors," was developed to assess aspects of the working relationship between FAA AWIs and those business operators within the aviation industry.

PROCEDURE

The Office of Airworthiness and the Civil Aeromedical Institute (CAMI) jointly developed the survey instrument, which consisted of 21 items. Of the items, four refer to aspects of the user's awareness of, and familiarity with, agency regulations, policies, and the duties and responsibilities of AWI's, as well as the extent to which the current regulations permit flexibility in decision-making. The remaining items assess user perceptions of aspects of their interactions with AWIs, including AWI availability, competence, conduct of duties, and communication, to mention a few. In a short demographic section of the survey, respondents were requested to identify: (1) the FAA region within which they are located; (2) the location and type of FAA District Office with which they have contact; (3) the aviation activity that is most representative of their current work; and (4) their length of time in the aviation business. Space was provided for the respondent to write the complete location of his/her servicing office. For the 21 questionnaire items, users were asked to indicate the degree to which they agreed with each statement by selecting one of six available alternatives ("not at all", "to a limited extent", "to a moderate extent", "to a considerable extent", "to a great extent", or "do not know". Space for written comments was provided at the end of the questionnaire. A copy of the booklet is included in Appendix A.

The Sample. The survey sample was developed from mailing lists of members provided by several aviation organizations. Although an indeterminate number of individuals named on those lists was probably not a proper target for the survey, each of the 8,854 listed persons was sent a copy of the questionnaire and a franked return envelope in December 1985. A follow-up letter prompting participants to return the questionnaire was mailed approximately 15 days following the initial distribution of the survey. After eliminating 171 questionnaires that were returned as undeliverable, the adjusted number of assumably delivered forms was 8,683.

Returns. Returns were received from 3,913 anonymous users. Of this group, 295 were not included in the analysis due to the lateness (after

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March 1986), or incompleteness of their response, or an indication that the respondent felt that the questionnaire was not appropriate for his/her business. The overall response rate was 45%, but this is probably an underestimate of the actual user response rate, since it is known that not all persons on the final mailing list were qualified recipients of the questionnaire.

Comments made by the respondents were reviewed, and a numerical system was developed to code each comment for subsequent analysis. During scanning and initial analysis of the results, it was noted that there were frequent instances where respondents had failed to provide coded responses to some of the demographic questions, or where the responses were inconsistent with written information provided. This problem generally occurred when respondents had identified an ACDO, GADO, or FSDO that was no longer in existence. In instances where the respondent provided written information concerning location of the facility, an up-to-date code was used, based on the current list of existing flight standards district offices and numbers provided by the regions. Missing codes or inconsistencies were reconciled in 1,030 cases. Also, comments from a number of respondents who indicated that their major aviation activity was "Part 91 Operator" led to creation of an additional demographic breakdown which had not been included in the original questionnaire. Thus, modification of the data base was required to include missing information from the respondents, to correct inconsistent data, and to categorize responses from Part 91 Operators.

RESULTS

Responding Users. Characteristics of the responding sample are provided in Table 1. The regional proportions of returned questionnaires tended to reflect the number of aircraft repair stations and the amount of related aviation activity in the various FAA regions. Thus, the FAA's Great Lakes (AGL), Southwest (ASW), Southern (ASO), and Eastern (AEA) regions each produced 13-17% of the responses while New England (ANE) and Alaskan (AAL) had the lowest percentages (3.8% and 2.5%, respectively). Percentages of respondents from the other regions were intermediate. Most of the respondents (67.9%) indicated that the inspector assigned to their operation was from a Flight Standards District Office (FSDO). Although respondents were requested to indicate the major aviation activity on which they based their ratings, 897 (24.8%) failed to provide that designation. The largest percentage of the respondents who did indicate their major aviation activity were Part 135 Certificate Holders (29.5%) and a sizeable percentage (19.3%) was involved with Certificated Repair Stations. No other category reached as high as 9% and several categories, (Part 125, Part 127, and Part 133 Certificate Holders, Certified Parachute Lofts, Approved Aviation Technical Schools, and FAA Parachute Riggers) each comprised less than 1% of the responses. Most of the respondents (71.0%) had been in some aspect of the aviation business for 11 or more years, 14.0% had been active for 6-10 years and only 5.3% indicated that they had been in the business for 5 years or less (data for 9.7% were missing). Information concerning characteristics of the respondents was used to make comparisons between regions, types of servicing office, and various user aviation activities.

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TABLE 1.-CHARACTERISTICS OF RESPONDENTS TO THE FAA SURVEY OF USERS: AIRWORTHINESS INSPECTORS

REGION	NUMBER	PERCENT
AAL	92	2.5
ACE	247	6.8
AEA	493	13.6
AGL	619	17.1
ANE	137	3.8
ANM	312	8.6
ASO	556	15.4
ASW	584	16.1
AWP	372	10.3
MISSING	206	5.7

MAJOR FUNCTION	NUMBER	PERCENT
PART 91 OPERATOR	58	1.6
PART 121 CERTIFICATE HOLDER	55	1.5
PART 125 CERTIFICATE HOLDER	15	0.4
PART 127 CERTIFICATE HOLDER	1	0.0
PART 133 CERTIFICATE HOLDER	14	0.4
PART 135 CERTIFICATE HOLDER	1069	29.5
PART 137 CERTIFICATE HOLDER	67	1.9
CERTIFICATED REPAIR STATION	698	19.3
CERTIFICATED PARACHUTE LOFT	1	0.0
APPROVED AVIATION TECHS SCHOOL	6	0.2
INSPECTION AUTHORIZED MECHANIC	281	7.8
CERTIFICATED REPAIRMAN	46	1.3
CERTIFICATED MECHANIC	314	8.7
FAA PARACHUTE RIGGER	0	0.0
FAA DESIGNATED PERSON	96	2.7
MISSING	897	24.8

OFFICE TYPE		
ACDO	21	.6
FSDO	2457	67.9
GADO	919	25.4
MISSING	221	6.1

TIME IN AVIATION		
5 YEARS OR LESS	191	5.3
6 TO 10 YEARS	507	14.0
11 TO 20 YEARS	1153	31.9
21 YEARS OR MORE	1416	39.1
MISSING	351	9.7

Analyses of Responses. Percentages of respondents selecting each of the six response alternatives, including the "do not know" category, were calculated and are provided in Table 2. The proportion of respondents selecting "do not know" ranged from 0% for the item (Q1) concerning respondents' familiarity with FAA regulations that apply to their aviation functions to 15.9% for the item (Q20) concerning respondent satisfaction with participation by AWIs in safety seminars and other public meetings. On the remaining questions, 7% or less selected the "do not know" response alternative. For statistical comparisons, the "do not know" responses were considered as missing values.

Responses to the first two rating alternatives ("not at all" and "to a limited extent") were combined to produce a non-positive response category and responses for the last three rating alternatives ("to a moderate extent", "to a considerable extent", and "to a great extent") were combined to produce a positive response category. The percentages of users who selected one of the three alternatives comprising the positive response category for each item are shown in Table 3 for each region and for the nation overall.

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TABLE 2.-OVERALL PERCENTAGE OF USERS SELECTING EACH OF THE RESPONSE ALTERNATIVES BY ITEM IN THE FAA SURVEY OF USERS: AIRWORTHINESS INSPECTORS

TO WHAT EXTENT:	Not at all	Limited	Moderate	Considerable	Great	Don't Know
1. are you familiar with the FAA regulations that apply to your aviation functions?	0.1	1.7	16.7	47.5	33.9	0.0
2. are you familiar with the FAA published policies and interpretations regarding those regulations that apply to your aviation functions?	2.0	13.4	31.2	38.7	14.3	0.4
3. do those regulations policies, and interpretations give you flexibility in making decisions about the work you do?	8.0	33.4	33.4	20.5	6.4	2.2
4. are you aware of the duties and responsibilities of airworthiness inspectors?	1.9	20.1	29.3	33.4	14.7	0.7
5. are you visited during the year by airworthiness inspectors assigned to you or your facility?	7.2	35.7	36.7	15.2	4.5	0.6
6. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA regulations?	0.4	5.2	18.5	42.8	33.5	3.6
7. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA published policies and interpretations supporting the regulations?	0.5	8.8	19.5	39.6	25.4	6.1
8. do airworthiness inspectors, assigned to you or your facility, interpret the regulations in a consistent way?	4.5	17.8	22.8	36.0	14.0	4.9
9. do airworthiness inspectors, assigned to you or your facility, interpret the regulations accurately?	0.8	11.3	22.9	40.8	17.2	7.0
10. do airworthiness inspectors, assigned to you or your facility, explain the regulations and your options clearly?	5.5	18.5	22.9	31.5	18.6	2.8
11. are differences of opinion between you and airworthiness inspectors (regarding interpretations of a regulation) resolved in mutually acceptable ways?	4.9	15.8	22.8	33.0	18.0	5.6
12. do airworthiness inspectors, assigned to you or your facility, conduct their duties in a thorough way?	1.4	8.4	19.5	41.6	24.5	4.5
13. do airworthiness inspectors, assigned to you or your facility, appear to be technically competent in the conduct of their duties?	2.3	12.1	20.7	37.4	23.8	3.5
14. are airworthiness inspectors, assigned to you or your facility, courteous in the conduct of their duties?	1.1	4.7	11.9	34.1	46.1	2.2
15. do airworthiness inspectors, assigned to you or your facility, appear to understand your organization and its needs?	4.8	15.7	21.5	33.7	20.9	3.5
16. do airworthiness inspectors, assigned to you or your facility, provide clear and accurate answers to your questions?	2.8	16.6	24.1	35.4	18.9	2.1
17. do airworthiness inspectors, assigned to you or your facility, provide answers in a timely manner?	3.0	14.2	22.1	37.4	21.0	2.3
18. do you rely on airworthiness inspectors for counseling in technical areas?	16.7	37.7	23.2	14.2	7.1	1.2
19. do you rely on airworthiness inspectors for counseling in regulatory areas?	7.0	32.3	28.5	20.8	10.3	1.1
20. are you satisfied with participation by airworthiness inspectors in safety seminars and other public meetings?	4.5	13.9	22.6	27.4	15.6	15.9
21. are you satisfied with the performance of airworthiness inspectors, assigned to you or your facility?	3.7	12.9	22.2	36.3	23.1	1.8

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TABLE 3.-PERCENTAGES OF POSITIVE RESPONSES NATIONALLY AND BY FAA REGION FROM EACH ITEM IN THE FAA SURVEY OF USERS: AIRWORTHINESS INSPECTORS

TO WHAT EXTENT:	NATIONAL OVERALL	FAA REGION								
		AAL	ACE	AEA	AGL	ANE	ANM	ASO	ASW	AWP
1. are you familiar with the FAA regulations that apply to your aviation functions?	98.1	98.9	97.6	99.2	98.1	98.5	98.4	98.6	98.1	97.6
2. are you familiar with the FAA published policies and interpretations regarding those regulations that apply to your aviation functions?	84.6	77.2	86.2	88.6	82.8	83.2	82.2	85.0	86.2	84.4
3. do those regulations policies, and interpretations give you flexibility in making decisions about the work you do?	61.7	56.5	61.9	65.9	55.6	68.2	57.8	62.7	63.2	65.8
4. are you aware of the duties and responsibilities of airworthiness inspectors?	77.9	76.1	76.1	81.3	77.4	75.6	74.4	78.0	78.8	80.3
5. are you visited during the year by airworthiness inspectors assigned to you or your facility?	56.8	66.3	59.4	58.6	53.2	48.2	58.4	51.6	62.6	59.9
6. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA regulations?	94.2	95.7	97.0	94.1	92.8	91.0	94.1	95.6	95.2	94.3
7. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA published policies and interpretations supporting the regulations?	90.0	89.8	96.1	90.8	88.9	84.0	86.1	93.2	93.6	89.4
8. do airworthiness inspectors, assigned to you or your facility, interpret the regulations in a consistent way?	76.6	69.6	82.6	79.7	75.5	73.5	71.5	81.1	76.3	72.3
9. do airworthiness inspectors, assigned to you or your facility, interpret the regulations accurately?	86.9	78.9	91.2	87.7	87.1	80.3	82.0	90.2	88.5	86.6
10. do airworthiness inspectors, assigned to you or your facility, explain the regulations and your options clearly?	75.3	69.2	84.6	76.6	78.6	69.4	69.6	77.9	76.5	73.4
11. are differences of opinion between you and airworthiness inspectors (regarding interpretations of regulations) resolved in mutually acceptable ways?	78.1	67.0	78.4	79.4	76.9	80.5	76.3	79.3	80.7	78.6
12. do airworthiness inspectors, assigned to you or your facility, conduct their duties in a thorough way?	89.7	91.2	93.2	89.8	88.3	89.0	85.8	92.0	90.7	89.4
13. do airworthiness inspectors, assigned to you or your facility, appear to be technically competent in the conduct of their duties?	85.1	80.2	86.9	86.4	84.3	81.2	81.8	88.0	85.3	84.5
14. are airworthiness inspectors, assigned to you or your facility, courteous in the conduct of their duties?	94.2	92.4	97.1	95.6	93.2	91.9	90.6	95.4	93.5	95.9
15. do airworthiness inspectors, assigned to you or your facility, appear to understand your organization and its needs?	78.8	67.4	83.8	80.2	78.0	76.9	76.0	83.1	79.7	74.7
16. do airworthiness inspectors, assigned to you or your facility, provide clear and accurate answers to your questions?	80.2	75.0	85.8	83.6	78.2	77.2	77.3	82.6	80.1	78.0
17. do airworthiness inspectors, assigned to you or your facility, provide answers in a timely manner?	82.5	87.0	86.4	84.1	80.3	80.0	79.8	84.7	84.7	76.4
18. do you rely on airworthiness inspectors for counseling in technical areas?	45.0	41.8	50.2	46.8	41.9	37.2	46.0	47.2	47.6	40.0
19. do you rely on airworthiness inspectors for counseling in regulatory areas?	60.3	59.8	64.2	60.6	57.7	56.2	65.5	63.3	58.1	58.7
20. are you satisfied with participation by airworthiness inspectors in safety seminars and other public meetings?	78.0	70.1	86.3	76.7	77.2	81.0	72.9	81.3	78.9	73.5
21. are you satisfied with the performance of airworthiness inspectors, assigned to you or your facility?	83.1	73.9	89.0	86.1	81.1	80.3	77.7	86.8	84.0	80.4

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In categorizing the various aspects of the performance of AWIs, user responses were considered satisfactory if 80% or more of the respondents selected one of the positive alternatives. Items for which less than 80% of the respondents selected the positive alternatives identify performance areas that could be targeted for improvement. This cutoff is compatible with other research concerning consumer satisfaction with services. In those studies, average or better levels of satisfaction for higher ranking professional/technical occupations were reported by 70-91% of the respondents. Of course, the relationship between AWIs and aviation users is different from most other "consumer relations", since AWIs perform a relatively unique regulatory function with implications not involved in most studies of consumer satisfaction. Table 4 provides a summary of the AWI performance areas above and below the positive criterion.

TABLE 4.-AREAS OF AWI PERFORMANCE ABOVE AND BELOW THE POSITIVE CRITERION (SURVEY ITEMS 5 THROUGH 21)

ABOVE 80% POSITIVE

- o knowledgeable concerning FAA regulations (94.2%)
- o courteous in the conduct of their duties (94.2%)
- o knowledgeable of FAA published policies and interpretations supporting the regulations (90%)
- o thorough in the conduct of their duties (89.7%)
- o able to interpret the regulations accurately (86.9%)
- o technically competent (85.1%)
- o overall satisfaction with AWI performance (83.1%)
- o able to answer questions in a timely manner (82.5%)
- o able to provide clear and accurate answers to questions (80.2%)

BELOW 80% POSITIVE

- o the understanding by AWIs of the user's organization and its needs (78.8%)
- o the resolution of AWI-user differences of opinion in mututally acceptable ways (78.1%)
- o participation by AWIs in safety seminars and other public meetings (78.0%)
- o the consistency of AWIs in interpretations of regulations (76.6%)
- o the extent to which AWIs explain regulations and options clearly (75.3%)
- o the extent to which users were visited by AWIs during the year (56.8%)
- o user reliance on AWIs for counseling in regulatory (60.3%) or technical (45%) areas

For analytic purposes, four major sets of statistical treatments were performed. One of these was a factor analysis based on each response to each item (the final item, Q21 on overall satisfaction, was omitted since it represented a criterion item). Results of that analysis (Table 5) yielded 3 factors by a principal components method with varimax rotation. The first factor (survey items 6 through 17 plus item 20) might be labeled

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TABLE 5.–FACTOR LOADINGS FOR RESPONSES TO THE FAA SURVEY OF USERS: AIRWORTHINESS INSPECTORS

QUESTION	FACTOR 1	FACTOR 2	FACTOR 3
Q 1		0.754	
Q 2		0.811	
Q 3		0.494	
Q 4		0.658	
Q 5			0.503
Q 6	0.750		
Q 7	0.785		
Q 8	0.829		
Q 9	0.841		
Q10	0.799		
Q11	0.651		
Q12	0.741		
Q13	0.800		
Q14	0.695		
Q15	0.751		
Q16	0.833		
Q17	0.722		
Q18			0.763
Q19			0.753
Q20	0.517		

ONLY LOADINGS ABOVE .400 ARE REPORTED

as "AWI Performance", the second (items 1 through 4), as "User Knowledge", and the third (items 5, 18, and 19), as "Contacts with AWIs". A second analysis yielded the intercorrelation of each questionnaire item with every other item (Table 6). And, finally, two multiple regression analyses were computed with overall user satisfaction (Q21) as the criterion variable. For the first regression analysis, each survey item and time in aviation served as the independent variables (Table 7), while in the second, the factor scores from the factor analysis were used (not shown).

Overall User Ratings. Applying the above-mentioned criteria, 90% or more of all responses were positive for user's own knowledge of regulations (Q1), AWI knowledge both of regulations (Q6) and supportive policies (Q7), and courteous behavior by AWIs (Q14). Six other items, including overall satisfaction (Q21–83.1%) yielded positive responses from 80–89% of users (see Table 3). These positive responses included user familiarity with published policies and interpretations of regulations, and satisfaction with AWI performance in the areas of thoroughness, technical competence, accurate interpretations of regulations, and, to lesser extents, clarity and timeliness of responses to questions posed by users (see Table 4).

Areas below the "satisfactory" cut off (i.e. those with less than 80% positive responses) included the perceived lack of user awareness of AWI duties (Q4), and (perhaps related) the lack of AWI awareness of user needs (Q15), along with items associated with user-perceived shortcomings

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regarding: the consistency of AWI interpretations (Q8), resolutions of AWI-user differences (Q11), clarity of explanations by AWI's about regulations and user options (Q10), and AWI participation in safety seminars and public meetings (Q20). The four remaining items were considerably lower, 45-62% positive (see Table 4). This grouping included all items (Q5, 18, 19) in factor 3 of the factor analysis (i.e. frequency of contacts with AWIs by visits and consultations) plus (Q3) the perceived flexibility of regulations and policies for decisions by users.

TABLE 6.-ITEM INTERCORRELATIONS FOR THE FAA SURVEY OF USERS: AIRWORTHINESS INSPECTORS

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21
Q1	---																				
Q2	.49	---																			
Q3	.17	.34	---																		
Q4	.34	.43	.28	---																	
Q5	.17	.18	.08	.27	---																
Q6	.15	.21	.18	.25	.23	---															
Q7	.12	.28	.25	.27	.23	.79	---														
Q8	.07	.24	.29	.23	.19	.63	.69	---													
Q9	.10	.23	.26	.23	.20	.66	.70	.79	---												
Q10	.11	.26	.28	.27	.22	.60	.65	.70	.70	---											
Q11	.12	.21	.26	.21	.18	.41	.44	.51	.52	.54	---										
Q12	.11	.20	.18	.25	.31	.59	.59	.61	.63	.61	.51	---									
Q13	.11	.20	.23	.23	.24	.64	.65	.66	.69	.65	.50	.69	---								
Q14	.11	.15	.22	.20	.18	.47	.49	.52	.54	.55	.52	.55	.59	---							
Q15	.10	.20	.28	.24	.21	.51	.55	.60	.61	.65	.56	.59	.64	.65	---						
Q16	.09	.20	.26	.24	.23	.60	.65	.69	.70	.73	.57	.65	.72	.61	.74	---					
Q17	.07	.17	.20	.21	.22	.49	.53	.57	.58	.59	.51	.60	.59	.56	.62	.71	- -				
Q18	.08	.18	.20	.23	.26	.34	.36	.39	.38	.43	.30	.43	.48	.34	.43	.46	.39	---			
Q19	.09	.15	.14	.21	.26	.36	.34	.35	.35	.43	.32	.38	.37	.36	.40	.42	.37	.59	---		
Q20	.08	.17	.18	.19	.20	.42	.42	.45	.46	.48	.37	.50	.49	.44	.46	.51	.48	.38	.37	---	
Q21	.09	.20	.24	.25	.27	.60	.63	.68	.69	.68	.59	.69	.72	.67	.74	.76	.67	.48	.44	.60	---

*All correlations are significant at the .01 level or better

Overall User Satisfaction. The final survey item, assessing user satisfaction with AWI performance, yielded an 83.1% overall positive response (see Table 3). The item intercorrelations (Table 6) and the regression analysis (Table 7) provide some useful information regarding the determinants of this rating and areas where improvements are likely to increase the rating. For example, the items (Q1-4) comprising Factor 2 (User Knowledge) had little relationship to the satisfaction rating; Factor 3 (Contacts with AWIs-Q5, 18, 19) had more, but, clearly, Factor 1, the actual performance of AWI's, had the strongest relationship. (This was supported by the second regression analysis of the factor scores on

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item 21, where Factor 1 was first to enter the equation, followed by Factor 3 and Factor 2.) The item regression analysis (Table 7) indicated that the three items which best predicted the overall satisfaction rating were: clear answers by AWIs to user questions (Q16), AWI thoroughness (Q12), and AWI understanding of the needs of the user (Q15). Three more items which added to the predictability of overall satisfaction ratings were items dealing with AWI participation in safety seminars and public meetings (Q20), courteousness (Q14), and consistency of interpretations (Q8).

TABLE 7.-STEPWISE MULTIPLE REGRESSION OF SURVEY ITEMS AND TIME IN AVIATION WITH OVERALL SATISFACTION (Q21)

STEP	ITEM	MULTIPLE r	r SQUARED	rSQ CHANGE	BETA
1	Q16	.75672	.57262	.57262	.175909
2	Q12	.80756	.65215	.07953	.198192
3	Q15	.83235	.69281	.04066	.198247
4	Q20	.84876	.72040	.02760	.176278
5	Q14	.85722	.73482	.01442	.162140
6	Q8	.86390	.74633	.01151	.158042

Comments by Users. Percentages of comments written by the users, as coded into various categories by region, are presented in Table 8. Examples of the general comments within each of the categories are included in Appendix B. Of the user respondents, 42.3% provided one or more written comments. Of these comments, 5.5% fell in a general information category ("The above responses concern the FAA and our manufacturing/repair functions. We also deal with the modification branch."). Nearly one fourth (24.1%) of the comments were favorable and could be accounted for by three categories. Most favorable comments praised the performance of the local office and/or inspectors in general (e.g., "All experience with the local people is positive. They are friendly, helpful, and know their jobs.") The next largest category included comments about a particular inspector who was cited for having a good working relationship with the respondent ("...is very knowledgeable of aviation technical and mechanical problems. He has been very helpful, as well as courteous."). In the final favorable category, the agency was cited for doing a good job ("The FAA is by far the most efficient and professional of all government agencies I have worked with, and I have worked with a great many.").

Negative statements comprised 70.3% of all comments. Almost half of these alleged inconsistency and lack of knowledge/skills/training/manpower. The single category with the largest number of unfavorable commments (13.1%) was concerned with the lack of consistency of inspectors both within and between offices ("No set rules or regulations. Decision is left to each inspector to interpret the regulations in his region. No two regions seem to apply the same rules."). The next highest percentage (10.6%) referred to limited manpower and an apparent need for more inspectors ("FAA seems to be understaffed, their visits are few and far between."). A third major category of negative comments (also 10.6%) involved the training/knowledge/skills of inspectors ("Most inspectors avoid discussing

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anything technical about aircraft or equipment, as most have no recent hands-on experience or training on the subjects."). No other single category of comments comprised as much as 8% of the total responses.

In general, the comments tended to provide some personalized support for ratings made below the satisfactory cutoff score for the frequency of inspection visits (Q5), consistency of interpretations of regulations (Q8), clarity of explanations (Q10), and resolutions of differences of opinion (Q11). The comments may also suggest some reasons why inspectors are not more frequently relied on by users for counseling in technical (Q18) and regulatory (Q19) areas.

TABLE 8.-SUMMARY TABLE OF COMMENTS PROVIDED BY RESPONDENTS NATIONALLY AND BY FAA REGION TO THE FAA SURVEY OF USERS: AIRWORTHINESS INSPECTORS

	NATIONAL OVERALL	FAA REGIONS AAL	ACE	AEA	AGL	ANE	ANM	ASO	ASW	AWP
TOTAL NUMBER OF RESPONDENTS	3618	92	247	493	619	137	312	556	584	372
TOTAL NUMBER OF RESPONDENTS MAKING COMMENTS	1529	42	99	205	269	59	141	264	213	168
PERCENTAGE OF RESPONDENTS MAKING COMMENTS	42.3	45.7	40.1	41.6	43.5	43.1	45.2	47.5	36.5	45.2
TOTAL NUMBER OF SEPARATE COMMENTS CODED	2029	57	120	279	362	80	197	350	273	218
COMMENTS CATEGORY	PERCENTAGE OF COMMENTS									
FAVORABLE										
GOOD LOCAL OFFICE AND/OR INSPECTORS	18.1	17.5	21.7	22.5	16.3	21.3	12.7	18.3	20.9	14.7
PARTICULAR PERSON CITED FOR GOOD RELATIONSHIP	4.3	8.8	4.2	5.7	3.0	2.5	5.6	3.7	4.8	4.6
AGENCY DOES A GOOD JOB	1.7	0.0	0.8	1.4	0.6	2.5	2.0	3.1	1.1	1.8
NON-FAVORABLE										
TOO MANY INSPECTORS	0.2	0.0	0.8	0.0	0.0	0.0	0.5	0.3	0.0	0.9
NEED MORE INSPECTORS (LIMITED MANPOWER)	10.6	5.3	6.7	16.5	11.9	12.5	6.1	10.0	8.1	12.8
LIMITED AVAILABILITY (LACK OF MANPOWER NOT CITED)	3.5	3.5	4.2	2.5	3.0	5.0	4.1	2.9	5.1	3.7
INSPECTORS ARE INCONSISTENT (WITHIN AND BETWEEN OFFICES)	13.1	10.5	17.5	10.0	14.1	20.0	13.7	14.3	11.4	11.9
INSPECTORS LACK KNOWLEDGE, SKILLS, ABILITY, TRAINING	10.6	10.5	8.3	10.0	11.0	5.0	15.7	7.1	12.5	10.6
ATTITUDES OF INSPECTORS (AUTHORITARIAN, UNHELPFUL)	7.2	8.8	9.2	4.7	7.7	5.0	9.1	7.4	7.7	7.3
AGENCY IS TOO REGULATED/RESTRICTIVE	2.0	7.0	0.8	0.7	1.9	2.5	2.5	1.1	2.6	2.3
AGENCY POLICIES/PROCEDURES MAKE WORK DIFFICULT	7.6	1.8	8.3	6.5	8.0	10.0	9.6	8.3	8.4	5.5
AGENCY IS TOO LAX/DOESN'T ENFORCE REGULATIONS	6.0	15.8	2.5	5.0	7.7	8.8	5.1	5.1	3.7	6.9
REGULATIONS ARE TOO DIFFICULT TO READ/INTERPRET	5.4	8.8	4.2	6.1	3.9	2.5	4.1	7.1	5.9	5.0
GENERAL NEGATIVE/MISCELLANEOUS	3.9	0.0	3.3	4.3	4.1	1.3	4.1	3.1	2.9	6.9
GENERAL INFORMATION	5.5	1.8	7.5	3.9	6.6	1.3	5.1	8.0	5.1	5.0

Results by Regions. One way of further analyzing the data is to examine differences among regions (see Table 3). The variability of positive responses to a given item ranged from 1.6% (Q1 -user knowledge of regulations) to 18.1% (Q5 -frequency of AWI visits). Overall, across regions 14 items had a range of positive scores greater than 10% and six items ranged from 6.0-9.4%. An examination of Table 3 indicates that, overall, the Central Region (ACE) had the most positive responses, followed by a clustering of the Eastern (AEA), Southern (ASO), and Southwest (ASW) Regions. The lowest positive scores for a number of items were shared by the two smallest regions- Alaska (AAL) and New England (ANE) and by the Northwest Mountain region (ANM).

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TABLE 9.-PERCENTAGE OF POSITIVE RESPONSES NATIONALLY AND BY AVIATION ACTIVITY FOR EACH ITEM IN THE FAA SURVEY OF USERS: AIRWORTHINESS INSPECTORS

TO WHAT EXTENT:	NATIONAL OVERALL	AVIATION BUSINESS ACTIVITY									
		PART 91	PART 121	PART 135	PART 137	CERT STAT	INSP MECH	CERT REPR	CERT MECH	DESG PERS	OTHER*
1. are you familiar with the FAA regulations that apply to your aviation functions?	98.1	98.3	98.2	99.1	100.0	99.0	99.6	97.8	98.7	96.9	97.3
2. are you familiar with the FAA published policies and interpretations regarding those regulations that apply to your aviation functions?	84.6	72.4	87.3	82.8	86.4	88.4	85.7	89.1	86.9	90.6	73.0
3. do those regulations policies, and interpretations give you flexibility in making decisions about the work you do?	61.7	66.1	70.6	54.1	61.5	64.4	61.2	61.4	69.1	68.4	58.3
4. are you aware of the duties and responsibilities of airworthiness inspectors?	77.9	57.9	89.1	77.4	75.8	83.6	80.3	78.3	78.5	84.2	83.8
5. are you visited during the year by airworthiness inspectors assigned to you or your facility?	56.8	12.3	77.8	68.4	67.2	68.8	41.4	60.9	32.9	42.7	55.6
6. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA regulations?	94.2	86.3	98.9	94.0	93.9	97.1	91.5	93.3	97.3	92.6	97.2
7. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA published policies and interpretations supporting the regulations?	90.0	89.6	85.2	88.5	89.1	93.0	88.9	88.1	95.5	90.2	82.4
8. do airworthiness inspectors, assigned to you or your facility, interpret the regulations in a consistent way?	76.6	73.8	67.3	70.1	73.1	83.8	76.1	85.4	82.2	80.0	74.3
9. do airworthiness inspectors, assigned to you or your facility, interpret the regulations accurately?	86.9	95.0	81.1	84.1	81.5	90.3	88.5	94.9	91.1	86.2	86.1
10. do airworthiness inspectors, assigned to you or your facility, explain the regulations and your options clearly?	75.5	69.4	67.3	70.6	74.6	83.4	73.2	81.0	80.2	76.8	75.7
11. are differences of opinion between you and airworthiness inspectors (regarding interpretations of regulations) resolved in mutually acceptable ways?	78.1	77.8	78.2	72.9	76.6	86.4	80.9	83.7	79.4	80.2	82.9
12. do airworthiness inspectors, assigned to you or your facility, conduct their duties in a thorough way?	89.7	82.9	90.9	88.8	85.1	94.0	87.5	90.5	88.9	87.2	88.9
13. do airworthiness inspectors, assigned to you or your facility, appear to be technically competent in the conduct of their duties?	85.1	89.8	76.4	84.5	80.3	87.0	79.9	86.4	86.0	85.1	86.1
14. are airworthiness inspectors, assigned to you or your facility, courteous in the conduct of their duties?	94.2	94.5	94.5	92.3	86.4	97.7	95.7	93.3	96.1	95.8	94.6
15. do airworthiness inspectors, assigned to you or your facility, appear to understand your organization and its needs?	78.8	80.9	81.8	74.2	74.6	86.6	75.6	81.4	82.8	78.7	82.9
16. do airworthiness inspectors, assigned to you or your facility, provide clear and accurate answers to your questions?	80.2	81.8	72.7	76.3	77.6	86.9	81.4	79.5	82.5	78.9	86.5
17. do airworthiness inspectors, assigned to you or your facility, provide answers in a timely manner?	82.5	82.7	74.5	77.8	82.1	88.0	84.9	82.2	85.7	87.4	83.8
18. do you rely on airworthiness inspectors for counseling in technical areas?	45.0	32.7	44.4	48.2	55.2	43.7	41.8	37.0	40.3	41.1	40.5
19. do you rely on airworthiness inspectors for counseling in regulatory areas?	60.3	35.7	66.7	60.9	64.2	71.5	59.1	58.7	51.4	54.7	75.7
20. are you satisfied with participation by airworthiness inspectors in safety seminars and other public meetings?	78.0	66.7	78.9	78.1	82.5	80.8	76.6	74.3	79.3	74.4	72.7
21. are you satisfied with the performance of airworthiness inspectors, assigned to you or your facility?	83.1	88.9	90.9	78.2	82.1	89.5	79.9	78.3	85.4	85.4	86.1

*This breakdown is a combination of Parts 125, 127, and 133 certificate holders, certificated parachute lofts, and approved aviation technicians schools.

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Generally low scores across regions for given items suggest areas where an agency-wide effort or emphasis probably would be required to bring about significant improvement. On the other hand, high positive scores tabulated for any given item in one or more regions suggest that improvement, to at least those levels, is attainable for any region.

Results by Aviation Activity. Another way of analytically evaluating the same overall data is to examine differences as they relate to specific user activities (see Table 9). Differences in the percentages of positive responses among aviation activity groups were larger than those noted for regions, ranging from 3.1% (Q1 -user knowledge of regulations) to 65.5% (Q5 -frequency of visits). Overall, across types of activity groupings, only one item (Q1) had a percentage range under 10%, 16 items varied from 10-19%, 3 items varied from 20-39%. An examination of Table 9 indicates that the Certificated Repair Station (CERT STAT) respondents had more items with positive responses than any of the other activity groupings. Some of the lowest positive scores for items were from Part 91 Operators. Part 121 Certificate Holders presented an interesting response pattern. Next to CERT STAT respondents, they exhibited the highest positive scores on several items; however, they also followed Part 91 Operators in the number of items for which they had the least positive scores. These three groups (CERT STAT, Part 91, and Part 121), also had the highest positive

TABLE 10.-SUMMARY TABLE OF COMMENTS FROM RESPONDENTS BY THEIR AVIATION BUSINESS ACTIVITY TO THE FAA SURVEY OF USERS: AIRWORTHINESS INSPECTORS

	AVIATION BUSINESS ACTIVITY									
	PART 91	PART 121	PART 135	PART 137	CERT STAT	INSP MECH	CERT REPR	CERT MECH	DESG PERS	OTHERS*
TOTAL NUMBER OF RESPONDENTS	58	55	1069	67	698	281	46	314	96	37
TOTAL NUMBER OF RESPONDENTS MAKING COMMENTS	52	26	511	21	309	124	17	115	40	16
PERCENTAGE OF RESPONDENTS MAKING COMMENTS	89.7	47.3	47.8	31.3	44.3	44.1	37.0	36.6	41.7	43.2
TOTAL NUMBER OF SEPARATE COMMENTS CODED	58	34	682	31	420	176	23	144	57	25
COMMENTS CATEGORY										
FAVORABLE	PERCENTAGE OF COMMENTS									
GOOD LOCAL OFFICE AND/OR INSPECTORS	19.0	8.8	15.1	25.8	23.1	18.8	17.4	15.3	15.8	8.0
PARTICULAR PERSON CITED FOR GOOD RELATIONSHIP	3.4	2.9	4.8	0.0	6.4	1.7	0.0	2.1	0.0	0.0
AGENCY DOES A GOOD JOB	3.4	2.9	2.1	0.0	1.4	0.0	4.3	1.4	1.8	4.0
NON-FAVORABLE										
TOO MANY INSPECTORS	0.0	0.0	0.6	0.0	0.2	0.0	0.0	0.0	0.0	0.0
NEED MORE INSPECTORS (LIMITED MANPOWER)	3.4	17.6	7.8	6.5	14.5	14.8	8.7	13.9	14.0	20.0
LIMITED AVAILABILITY (LACK OF MANPOWER NOT CITED)	3.4	2.9	2.9	6.5	3.6	5.7	4.3	5.6	3.5	0.0
INSPECTORS ARE INCONSISTENT (WITHIN AND BETWEEN OFFICES)	0.0	8.8	12.6	12.9	13.6	13.1	4.3	10.4	15.8	24.0
INSPECTORS LACK KNOWLEDGE, SKILLS, ABILITY, TRAINING	0.0	20.6	11.3	9.7	8.3	12.5	17.4	11.8	8.8	8.0
ATTITUDES OF INSPECTORS (AUTHORITARIAN, UNHELPFUL)	1.7	8.8	10.7	12.9	3.6	9.1	0.0	6.9	5.3	4.0
AGENCY IS TOO REGULATED/RESTRICTIVE	5.2	0.0	2.9	3.2	0.5	2.3	4.3	2.1	0.0	0.0
AGENCY POLICIES/PROCEDURES MAKE WORK DIFFICULT	1.7	11.8	9.8	3.2	6.7	6.8	0.0	4.2	8.8	8.0
AGENCY IS TOO LAX/DOESN'T ENFORCE REGULATIONS	0.0	8.8	4.8	6.5	6.7	6.3	8.7	9.7	7.0	8.0
REGULATIONS ARE TOO DIFFICULT TO READ/INTERPRET	3.4	2.9	5.4	12.9	5.5	5.1	17.4	4.9	8.8	8.0
GENERAL NEGATIVE/MISCELLANEOUS	3.4	2.9	4.7	0.0	2.4	2.8	8.7	4.9	7.0	0.0
GENERAL INFORMATION	51.7	0.0	4.4	0.0	3.6	1.1	4.3	6.9	3.5	8.0

*This category is a combination of Parts 125, 127, and 133 Certificate Holders, Certified Parachute Lofts, and Approved Aviation Technicians Schools.

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TABLE 11.-RANGES OF POSITIVE RESPONSES (PERCENTS) TO EACH ITEM AND NUMBER OF USERS (N) RESPONDING FOR DISTRICT OFFICES WITHIN EACH REGION

ITEM	AAL-FSDO	ACE-FSDO	AEA-GADO	AEA-FSDO	AGL-GADO	AGL-FSDO
1	88.9-100.0	96.0-100.0	96.3-100.0	97.9-100.0	96.6-100.0	97.1-100.0
2	66.7- 83.8	80.6- 91.9	64.3- 96.3	87.0- 94.3	74.1- 89.3	80.0- 92.9
3	29.2- 87.5	53.3- 71.4	55.9- 88.9	55.8- 79.2	43.2- 74.1	46.2- 53.3
4	55.6- 80.0	76.3- 81.8	66.7- 88.6	73.1- 86.4	75.9- 89.3	70.2- 86.7
5	55.6- 75.7	51.3- 75.7	46.9- 79.2	43.4- 68.2	41.5- 78.6	34.0- 66.7
6	88.9-100.0	97.4-100.0	85.7-100.0	90.9- 98.0	85.7- 96.4	78.6- 95.6
7	87.0-100.0	96.4-100.0	84.8-100.0	80.0- 94.0	82.5-100.0	78.6- 93.8
8	52.0- 83.8	80.0- 88.6	69.6- 91.2	77.6- 85.7	65.7- 84.0	58.1- 84.6
9	68.0- 88.9	89.2- 96.7	68.2- 96.3	85.4- 95.0	74.3- 93.9	78.6- 96.7
10	50.0- 88.9	83.3- 88.6	57.1- 88.9	74.0- 80.0	58.3- 84.0	57.1- 80.8
11	36.0- 88.9	63.3- 87.9	71.4-100.0	69.0- 80.0	65.7- 87.5	53.3- 83.3
12	89.2-100.0	89.5- 96.9	86.2- 96.9	84.0- 85.4	82.4- 98.1	84.6- 93.5
13	66.7- 86.5	77.4- 90.6	79.2- 96.3	79.5- 84.2	80.7- 86.5	78.6-100.0
14	91.9-100.0	94.7-100.0	87.5-100.0	90.2-100.0	80.6- 96.3	71.4- 95.6
15	55.6- 72.0	75.7- 90.6	70.8- 90.3	71.4- 81.8	70.6- 84.9	71.4- 83.3
16	64.0- 88.9	83.3- 93.5	82.4- 92.6	74.5- 80.0	74.3- 88.7	66.7- 84.6
17	88.0- 89.2	81.1- 91.7	75.0- 96.3	78.4- 90.9	75.9- 96.4	62.2- 91.7
18	37.5- 44.4	38.5- 57.1	35.4- 55.6	40.4- 52.2	25.0- 46.4	36.7- 64.3
19	48.0- 66.7	53.8- 75.0	26.7- 74.2	55.8- 65.9	44.4- 69.0	56.3- 69.2
20	65.0- 78.6	85.7- 90.6	69.8- 91.7	68.2- 83.3	64.6- 88.0	69.2- 93.3
21	72.0- 77.8	84.6- 93.1	81.3- 93.3	72.7- 81.8	74.3- 85.7	71.4-100.0
N=	9 - 37	32 - 50	15 - 48	22 - 53	27 - 58	13 - 79

ITEM	ANE-FSDO	ANM-FSDO	ASO-FSDO	ASW-FSDO	AWP-FSDO
1	100.0	98.0-100.0	97.7-100.0	95.3-100.0	94.2-100.0
2	75.0- 87.2	70.7- 89.1	33.3- 92.2	73.7- 95.8	69.2- 91.2
3	50.0- 71.4	53.4- 66.7	50.0- 67.4	53.8- 69.4	42.9- 90.0
4	68.2- 78.3	70.2- 76.1	66.7- 83.7	61.5- 92.6	46.2- 95.5
5	31.8- 50.0	43.5- 86.2	38.1-100.0	51.0- 78.6	22.2- 93.8
6	79.2- 90.9	90.9- 96.6	33.3- 98.0	87.0-100.0	82.4-100.0
7	65.2- 86.8	80.9- 87.3	33.3- 94.6	83.3- 97.8	70.6-100.0
8	58.3- 68.2	60.3- 80.4	33.3- 88.0	56.5- 86.8	33.3- 86.7
9	72.7- 80.0	74.5- 88.9	66.7- 94.8	80.6- 95.7	50.0-100.0
10	45.8- 65.8	63.8- 77.8	33.3- 88.0	63.2- 87.3	28.6- 87.5
11	75.0- 86.4	71.4- 82.2	66.7- 91.9	75.0- 86.4	57.1-100.0
12	79.2- 92.3	77.8- 91.4	82.4-100.0	75.0- 97.2	80.0-100.0
13	70.8- 84.2	73.7- 89.6	33.3- 96.0	65.2- 94.9	50.0-100.0
14	83.3-100.0	82.8- 98.0	66.7- 97.8	81.6- 98.4	88.2-100.0
15	65.2- 76.9	67.2- 83.3	33.3- 88.1	56.4- 92.3	22.2- 90.0
16	66.7- 76.9	70.7- 83.3	66.7- 88.1	62.5- 87.5	33.3- 95.0
17	58.3- 86.4	75.9- 87.9	66.7- 88.9	74.0- 95.0	33.3- 93.8
18	16.7- 46.2	39.1- 56.3	25.5- 55.3	37.5- 60.9	10.0- 71.4
19	41.7- 61.5	63.8- 67.4	33.3- 70.9	35.0- 65.6	42.9- 81.3
20	73.7- 84.4	68.4- 73.8	50.0- 93.8	67.5- 85.7	51.9-100.0
21	72.7- 83.3	71.1- 87.5	66.7- 90.2	62.5- 93.8	33.3- 95.0
N=	22 - 39	46 - 58	3 - 113	24 - 99	7 - 52

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ratings on overall satisfaction (88.9-90.9%). Part 135 Certificate Holders had the smallest percentage of positive responses for several items and the lowest overall satisfaction level (78.2%). It is noteworthy that the greatest variability across the aviation activity categories occurred for the item concerning visits during the year by AWIS (Q5). That item yielded a low score of 12.3% positive responses for Part 91 Operators and a high score of 77.8% positive for Part 121 Certificate Holders. The differences in percentages across these groupings reflects, to some degree, the emphasis that the agency places on inspections in each of the areas.

A categorization of the users' comments by their primary aviation activity areas is presented in Table 10. Part 121 users and users in the combined group made proportionately fewer overall favorable comments (14.6% and 12.0% respectively), than did users in any of the other groups. CERT STAT users had the highest percentage of favorable comments (30.9%). Compared to other user groups, Part 91 respondents made only a small percentage of negative comments; most of their comments (51.7%) fell in the general information category. Part 121 users and users in the combined group had the highest percentage of non-favorable comments concerning the need for more inspectors (17.6% and 20.0% respectively). Part 121 respondents and Certificated Repairmen had the highest percentage of comments concerning the lack of knowledge, skills, ability, and training of inspectors (20.6% and 17.4%, respectively).

Results by Facilities. Of perhaps most value in improving some aspects of the services of AWIs is to focus on the facility ratings made by the users. The variability of ratings, by item, is considerable among facilities (see Table 11). For example, on overall satisfaction with AWIs (Q21), the range of positive scores among facilities within a region is small for AAL (5.8%) and very large (61.7%) for AWP. By focusing on user-perceived deficiencies at selected facilities, considerable improvement in service to users may be feasible. A full report of results from each facility appears in Appendices C through I.

DISCUSSION

The level of satisfaction with AWIs expressed by the aviation business respondents of this survey is comparable to that obtained in studies of other selected professional areas. For example, Day and Bodur (1977), found the following levels of user satisfaction with public, professional and personal services: veterinarians (91%), income tax preparation services (88.3%), optometrists and opthalmologists (86.2%), scheduled major airline services (84.9%), dentists and dental technicians (84.8%), air commuter and air charter services (83.1%), medical doctors and nurses in offices or homes (81.3%), lawyers (79.2%), psychologists/marriage counselors (78.1%), medical doctors and nurses in hospitals (75.9%), the local telephone company (76.5%), and the U.S. postal service (69.2%). Lower levels of satisfaction were noted for such services as computer dating, nursing and rest homes, architects and home designers, and home security agencies/private detectives, among others. Andreasen and Best (1977), in their survey of dissatisfaction among purchasers of goods and services, provide a quote from the manager of the Consumer Research

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Division of Sears, Roebuck and Company. That manager noted that a "problem rate" (i.e. level of dissatisfaction) of 10-12% might be the lowest figure reasonably achievable in any survey of consumers.

In a large scale survey, Yankelovich, Skelly, and White, Inc. (1984) reported a 65% positive rating by taxpayers for their overall evaluation of Internal Revenue Service (IRS) performance based on direct contacts with the IRS; that rating may be compared to the 83.1% overall positive evaluation for AWIs. (It should be noted that items dealing with some specific aspects of the IRS' performance recieved higher ratings.) Yankelovich, et al., also asked taxpayers to provide ratings on a seven-point scale from "much better than others" to "much worse than others" to indicate their overall satisfaction with the services provided by IRS employees as compared to other federal departments. For that rating, 86% of the surveyed taxpayers rated the IRS from "about the same" to "much better than others", relative to other federal government departments. That finding, in conjunction with the overall 65% positive rating for the IRS, suggests a relatively high standing for AWI performance.

Within the past year (1985-1986), several state banking associations have completed participation in a National Bankers Association (NBA) Bank Examination Survey, which was designed to assess bank satisfaction with examinations conducted by the Federal Deposit Insurance Corporation (FDIC), the State, the Office of the Comptroller of the Currency (OCC), and the Federal Reserve. Based on available reports of participating banks in Kansas, 79% gave the FDIC a satisfaction rating of "average" or "good;" in Nebraska that percentage was 88%. A related finding of interest was the perceived consistency of evaluations made by examiners; in Kansas, 79% of the banks felt that the FDIC examiners had changed the basis for classifying loans from the previous examination (i.e., were not consistent), while only 31% felt the same way about the state examiners. By comparison, although the questions are obviously not directly comparable to those of the present survey, over 76% of user repondents were satisfied with the consistency of AWI's.

Based on the survey results reported here, aviation users appear to be generally satisfied with the manner in which AWIs conduct their duties (83.1% of the respondents indicated a "moderate" to "great extent" of overall satisfaction with AWI performance). Satisfaction was highest for AWI's courtesy in the conduct of their duties, their knowledge of FAA regulations and of FAA published policies and interpretations supporting the regulations, the thoroughness with which they conduct their duties, and the accuracy of their interpretations of the regulations. Most users did not rely heavily on AWIs for counseling in either technical or regulatory areas. Satisfaction with the performance of AWIs was below the positive cutoff for responses in areas concerning the number of AWI visits in a year, AWI consistency in interpretations of regulations, the extent to which AWIs clearly explained regulations and options, and the extent to which the regulations permitted the users flexibility in making decisions about the work they do.

Separate analyses of the same data by FAA regions and by the major aviation activity of the users, point to a fair consistency in the overall

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perceptions of the performance of AWIs, but some regions and some aviation business areas generate more positive responses than others. For example, AWIs in the Central (ACE), Southern (ASO), Eastern (AEA), and Southwest (ASW) regions are clearly perceived more satisfactorily than are those in the other regions. AWIs in the Alaska (AAL), New England (ANE), and Northwest Mountain (ANM) regions received the lowest proportions of positive ratings. Analyses by the user's primary aviation activity showed the most positive responses for AWIs who worked with Certificated Repair Stations. Some of the lowest positive responses on selected items regarding the performance of AWIs were from Part 135 Certificate Holders, who tied with Certificated Repairman (CERT REPR) for reporting the lowest positive rating for overall user satisfaction.

A finer focus is available through analysis by AWI facilities. This slice of the data gives more information on relative strengths and weaknesses and provides opportunities to (i) pinpoint locations where policies and procedures appear to be working either least effectively or most effectively and (ii) compare managerial procedures and conditions which differentiate the less successful from the more successful servicing facilities as indicated by the users.

These results tend to support other information gathered as a part of Project Safe. The Allen Corporation, in a study of FAA inspectors (1985), reported the concerns inspectors have about a lack of standardization which affects their consistency in the interpretation of regulations. This consistency issue was an area in the survey that users rated below the satisfactory cutoff score, and user comments (13.1%) noted the inconsistency of interpretations both within offices and between offices. A second area identified in Project Safe as one of concern to inspectors was that of "incomplete and outdated handbooks and other guidance material, as well as confusing and obsolete Federal Aviation Regulations (FARs)." While users responding to the survey were highly satisfied with AWI's knowledge of FAA regulations, publications, and policies, the single item that best predicted overall user satisfaction was concerned with clear and accurate answers from AWIs to user questions (Q16). Conceivably, inadequate guidance material and confusing FARs could contribute to user dissatisfaction in this regard. Related items that can be considered in a "needs to improve" category include consistent interpretations (Q8) and mutually acceptable resolutions of AWI/user differences of opinion in interpreting regulations (Q11).

CONCLUSIONS AND COMMENTS

1. The overall satisfaction level (83.1%) reported by users of AWI services is fully acceptable. It is within the range of levels reported in the literature for higher ranking professional/technical services, about in the middle of ratings recently reported for consumer satisfaction with work of FDIC bank examiners (by participating banks), and above overall ratings given the IRS (by taxpayers).

2. There are variations in user perceptions of AWI's between regions, between groupings of users by their primary aviation business activity, and by FAA facility. These differences should be closely examined to

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determine how improvements can be effected. Comparisons can be made of high vs. low rated facilities to determine what features of the facilities/inspectors/procedures produce the differences.

3. Results from this survey suggest that substantive improvements in varied forms of communication by AWI's will positively impact user satisfaction. These areas for continued efforts and/or improvement would include:

-Providing clear and accurate responses to questions
-Conducting duties thoroughly
-Gaining an understanding of the needs of the users' organizations (and communicating that understanding)
-Becoming involved in safety seminars and other public meetings
-Being courteous
-Working at maintaining consistency

4. Efforts should be devoted to increasing user awareness of the duties and responsibilities of AWIs.

5. Consistent with the goals of Project Safe, there is a need to improve standardization of interpretations of regulations, both within and between offices/regions. A mechanism to process unique problems and communicate interpretations to other offices should be included.

6. User comments and user responses to the item on the frequency of AWI visits suggested some need for additional AWI manpower. This finding supports current efforts (including Project Safe) to increase AWI staffing and, thereby, increase the frequency of visits to users.

7. An increase in AWI-user contact, in and of itself, will not necessarily lead to more satisfied users. As this study and others demonstrate, it is the quality of the interaction that is significant.

8. Although users were generally satisfied with the technical skills of AWIs, there were indications in the user's comments of some perceived need to upgrade the overall knowledge, skill, and abilities of AWI's. Training curricula and training schedules should address these issues and should incorporate instructional methods related to the communication needs noted above. An effective continuing education program for AWIs to upgrade and maintain their technical and communication skills should be developed.

9. User expectations play an important role in determining overall satisfaction. Nearly all users, regardless of the extent of their total aviation experience, report moderate or greater familiarity with FAA regulations. That user perceived level of their own expertise is likely to affect discussions and interactions with AWIs concerning interpretations of regulations. AWIs need to be aware of how these user perceptions may influence and shape user responses to interpretations.

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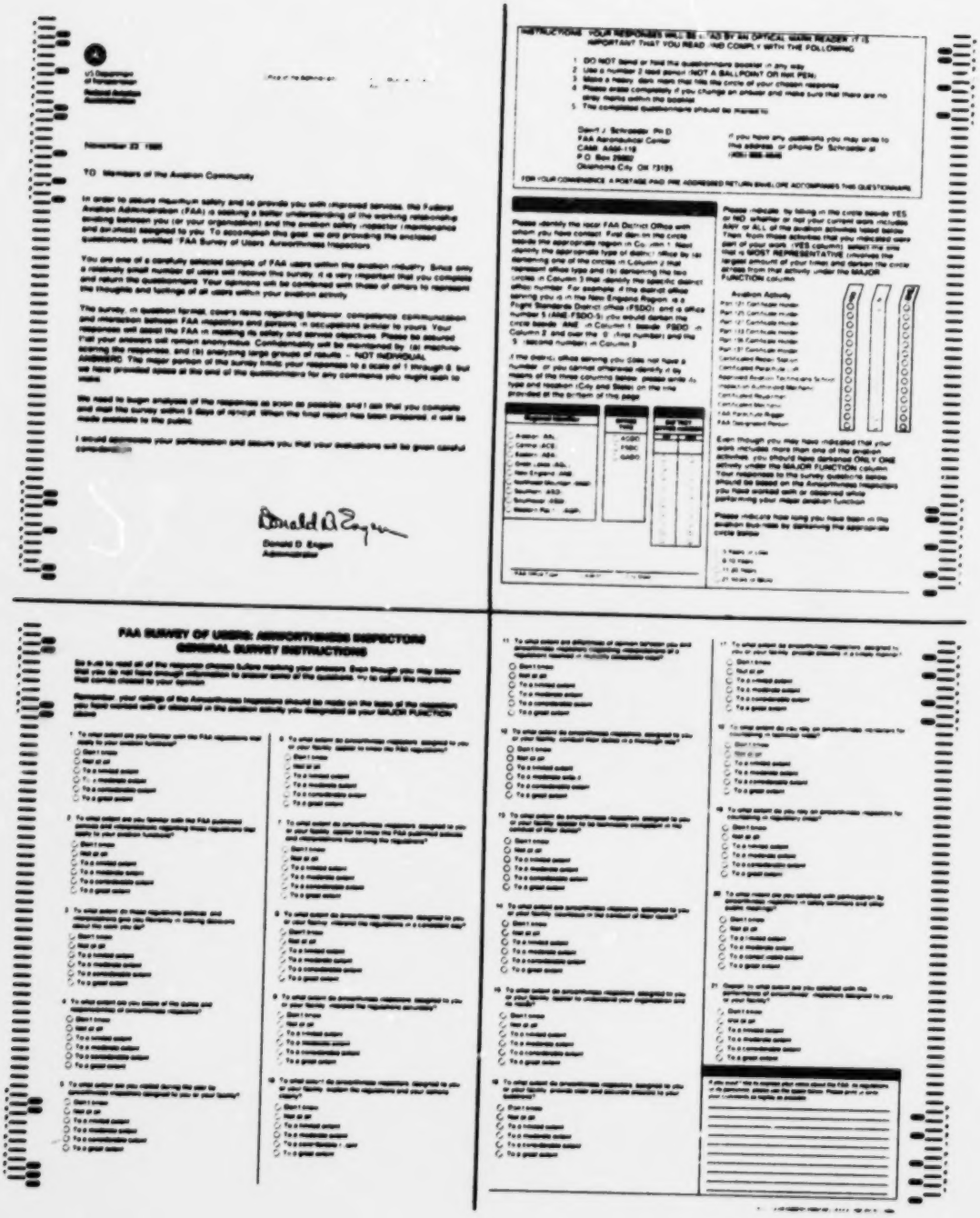
APPENDIX A



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APPENDIX B.–REPRESENTATIVE COMMENTS FROM SURVEY RESPONDENTS

GENERAL INFORMATION – 5.5% (NO.= 112 COMMENTS)

1. "We rely on manufacturer for most technical questions."
2. "For a period of time that ended 5 years ago I would have answered 14 and 21 quite differently."
3. "We are operating Part 91 and therefore not in contact with the GADO as much as when we were a Part 135 Certificate Holder."

FAVORABLE COMMENTS – 24.2% (NO.= 491 COMMENTS)

A. GOOD LOCAL OFFICE AND/OR INSPECTORS – 18.1%

1. "There exists a good working relationship between the governing GADO office and our operation."
2. "They are most helpful and are an asset to me."
3. "They do a fine job."

B. PARTICULAR PERSON CITED FOR GOOD RELATIONSHIP – 4.3%

1. ". . . has provided leadership with fairness in dealing with the aviation community."
2. "We wish to express a specific recommendation for . . ."
3. ". . . is a valuable person in your organization, if they were all like him, it would be great."

C. AGENCY DOES A GOOD JOB – 1.7%

1. "I have never worked with a better agency."
2. "Best appreciate FAA when compared to your foreign counterparts who are unresponsive autocrats."

NON–FAVORABLE COMMENTS – 70.3% (NO.= 1426)

A. INSPECTORS ARE INCONSISTENT (WITHIN AND BETWEEN OFFICES) – 13.1%

1. "I feel all regions are not treated equally. Some FAA inspectors require everything letter perfect, while others accept less."
2. "Each person has his own opinion about the same subject."
3. "It seems that everytime we get a new inspector he wants procedures done differently – it would be nice if they all wanted their procedures the same – IT WOULD SAVE TIME AND MONEY."

B. NEED MORE INSPECTORS (LIMITED MANPOWER) – 10.6%

1. "Need more inspectors."
2. "I feel in our area at least, that both maintenance and safety functions are limited by man power."
3. "Not enough inspectors assigned to enforce regulations."

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APPENDIX B.–REPRESENTATIVE COMMENTS FROM SURVEY RESPONDENTS (CONTINUED)

C. INSPECTORS LACK KNOWLEDGE, SKILLS, ABILITY, TRAINING – 10.6%

1. "Professional ability – poor, knowledge – very shallow."
2. "They often do not know what should be done about major issues."
3. "Lack mechanical knowledge and skills."

D. ATTITUDES OF INSPECTORS (AUTHORITARIAN, UNHELPFUL) – 7.2%

1. "If I ran my business the way the inspectors do I would not have a business."
2. "Too often the inspectors seem to be more interested in demonstrating their power and control over us peasants than in being of real service in resolving the problems of the aviation community. First priority seems to be to show that they are in charge."
3. "I have had very curt inspectors at times for no apparent reason...can be very intimidating."

E. LIMITED AVAILABILITY (LACK OF MANPOWER NOT CITED) – 3.5%

1. "Have never been visited by an AWI."
2. "Need more contact with general aviation."

F. TOO MANY INSPECTORS – 0.2%

1. "The FSDO is overstaffed and personnel are overpaid for the amount of work they do, it is twice as big as it needs to be."

G. AGENCY POLICIES/PROCEDURES MAKE WORK DIFFICULT – 7.6%

1. "Expedite U.S. certification procedures on previously U. S. registered aircraft.
2. "The entire regulatory system needs overhaul if general aviation is to survive."
3. "The major drawback is the repeated submission of requests that the FAA knows the answer to, but they make you discover it.

H. AGENCY IS TOO LAX/DOESN'T ENFORCE REGULATIONS – 6.0%

1. "It is my opinion that the FAA should keep a tighter rein on ALL aircraft maintenances."
2. "FAA takes little or limited stand in enforcing section 1305A, 1349A, and in policing sponsor's assurances under section 2210."
3. "Don't enforce consistently, one operator is leaned on heavily while another is unsupervised."

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APPENDIX B.–REPRESENTATIVE COMMENTS FROM SURVEY RESPONDENTS (CONTINUED)

I. REGULATIONS ARE TOO DIFFICULT TO READ/INTERPRET – 5.4%

1. "FAR's governing flight operations and pilot certification are very confusing and worthless in many cases."
2. "The problem of interpretations of regulations is always present."
3. "FAA regulations have long been known to be ambiguous, verbose, over-complicated. Stop trying to hide behind your lawyers and write documents that can be readily understood by all people in the aviation community."

J. AGENCY IS TOO REGULATED/RESTRICTIVE – 2.0%

1. "The industry is vastly over-regulated."
2. "Local inspectors are good men, but somewhat intimidated by FAA regulations and directives published by a bureaucracy that is more intent on being legally correct than they are on addressing problems in practical terms."

K. GENERAL NEGATIVE/MISCELLANEOUS – 3.9%

1. "There should be no double dipping."
2. "The FAA has been insensitive by reassigning their N numbers to other aircraft."

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APPENDIX C.--PERCENTAGES OF POSITIVE RESPONSES FOR ALASKAN AND NORTHWEST MOUNTAIN REGION FSDOS FOR EACH ITEM IN THE SURVEY

TO WHAT EXTENT:	FSDO						
	ALASKA			NORTHWEST MOUNTAIN			
	A	B	C	A	B	C	D
1. are you familiar with the FAA regulations that apply to your aviation functions?	100.0	88.9	100.0	100.0	100.0	98.3	98.0
2. are you familiar with the FAA published policies and interpretations regarding those regulations that apply to your aviation functions?	72.0	66.7	83.8	89.1	78.9	70.7	87.2
3. do those regulations policies, and interpretations give you flexibility in making decisions about the work you do?	29.2	87.5	70.6	58.7	66.7	53.4	58.3
4. are you aware of the duties and responsibilities of airworthiness inspectors?	80.0	55.6	75.7	76.1	70.2	74.1	75.0
5. are you visited during the year by airworthiness inspectors assigned to you or your facility?	72.0	55.6	75.7	43.5	55.2	86.2	52.1
6. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA regulations?	100.0	88.9	97.3	90.9	96.6	91.1	93.9
7. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA published policies and interpretations supporting the regulations?	87.0	100.0	91.7	86.4	87.0	87.3	80.9
8. do airworthiness inspectors, assigned to you or your facility, interpret the regulations in a consistent way?	52.0	77.8	83.8	75.6	60.3	69.0	80.4
9. do airworthiness inspectors, assigned to you or your facility interpret the regulations accurately?	68.0	88.9	86.5	79.5	83.6	79.5	88.9
10. do airworthiness inspectors, assigned to you or your facility explain the regulations and your options clearly?	50.0	88.9	78.4	77.8	71.9	63.8	64.6
11. are differences of opinion between you and airworthiness inspectors (regarding interpretations of regulations) resolved in mutually acceptable ways?	36.0	88.9	78.4	82.2	72.7	71.4	75.1
12. do airworthiness inspectors, assigned to you or your facility, conduct their duties in a thorough way?	91.7	100.0	89.2	77.8	91.4	82.8	89.1
13. do airworthiness inspectors, assigned to you or your facility, appear to be technically competent in the conduct of their duties?	83.3	66.7	86.5	88.4	81.0	73.7	89.6
14. are airworthiness inspectors, assigned to you or your facility, courteous in the conduct of their duties?	92.0	100.0	91.9	91.1	87.9	82.8	98.0
15. do airworthiness inspectors, assigned to you or your facility, appear to understand your organization and its needs?	72.0	55.6	73.0	82.6	70.2	67.2	83.3
16. do airworthiness inspectors, assigned to you or your facility, provide clear and accurate answers to your questions?	64.0	88.9	86.5	75.1	79.3	70.7	83.3
17. do airworthiness inspectors, assigned to you or your facility, provide answers in a timely manner?	88.0	88.9	89.2	78.3	37.9	75.9	84.8
18. do you rely on airworthiness inspectors for counseling in technical areas?	37.5	44.4	43.2	39.1	44.8	41.4	56.3
19. do you rely on airworthiness inspectors for counseling in regulatory areas?	48.0	66.7	64.9	67.4	67.2	63.8	64.6
20. are you satisfied with participation by airworthiness inspectors in safety seminars and other public meetings?	65.0	77.8	78.4	73.8	73.3	68.4	72.1
21. are you satisfied with the performance of airworthiness inspectors, assigned to you or your facility?	72.0	77.8	75.7	71.1	79.3	72.4	87.5
TOTAL NUMBER OF RESPONDENTS: No.	25	9	37	46	58	58	49

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APPENDIX D.-PERCENTAGES OF POSITIVE RESPONSES FOR NEW ENGLAND AND CENTRAL REGION FSDOS FOR EACH ITEM IN THE FAA SURVEY

	FSDO							
	NEW ENGLAND			CENTRAL				
TO WHAT EXTENT:	A	B	C	A	B	C	D	E
1. are you familiar with the FAA regulations that apply to your aviation functions?	100.0	100.0	100.0	100.0	97.3	100.0	96.0	100.0
2. are you familiar with the FAA published policies and interpretations regarding those regulations that apply to your aviation functions?	75.0	87.2	77.3	89.7	91.9	84.8	82.0	80.6
3. do those regulations policies, and interpretations give you flexibility in making decisions about the work you do?	50.0	66.7	71.4	60.5	60.0	59.4	71.4	53.3
4. are you aware of the duties and responsibilities of airworthiness inspectors?	78.3	73.7	68.2	76.3	78.4	81.8	77.1	78.1
5. are you visited during the year by airworthiness inspectors assigned to you or your facility?	50.0	43.6	31.8	51.3	75.7	60.6	69.4	59.4
6. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA regulations?	79.2	89.7	90.9	97.4	100.0	100.0	97.9	100.0
7. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA published policies and interpretations supporting the regulations?	65.2	86.8	77.3	97.2	100.0	100.0	97.8	96.8
8. do airworthiness inspectors, assigned to you or your facility, interpret the regulations in a consistent way?	58.3	67.6	68.2	81.1	82.4	87.5	88.6	80.0
9. do airworthiness inspectors, assigned to you or your facility interpret the regulations accurately?	72.7	80.0	72.7	89.2	93.9	96.7	91.3	92.6
10. do airworthiness inspectors, assigned to you or your facility explain the regulations and your options clearly?	45.8	65.8	59.1	86.5	88.6	84.8	87.2	93.3
11. are differences of opinion between you and airworthiness inspectors (regarding interpretations of regulations) resolved in mutually acceptable ways?	75.0	79.5	86.4	81.1	87.9	78.1	79.2	63.3
12. do airworthiness inspectors, assigned to you or your facility, conduct their duties in a thorough way?	79.2	92.3	90.9	89.5	94.3	96.9	91.7	93.3
13. do airworthiness inspectors, assigned to you or your facility, appear to be technically competent in the conduct of their duties?	70.8	84.2	72.7	89.5	88.6	90.6	89.6	77.4
14. are airworthiness inspectors, assigned to you or your facility, courteous in the conduct of their duties?	83.3	92.3	100.0	94.7	97.1	100.0	97.9	100.0
15. do airworthiness inspectors, assigned to you or your facility, appear to understand your organization and its needs?	65.2	76.9	72.7	75.7	88.6	90.6	83.0	90.0
16. do airworthiness inspectors, assigned to you or your facility, provide clear and accurate answers to your questions?	66.7	76.9	68.2	86.8	88.6	90.9	83.3	93.5
17. do airworthiness inspectors, assigned to you or your facility, provide answers in a timely manner?	58.3	84.2	86.4	81.1	85.7	90.9	91.7	87.1
18. do you rely on airworthiness inspectors for counseling in technical areas?	16.7	46.2	18.2	38.5	51.4	51.6	57.1	53.1
19. do you rely on airworthiness inspectors for counseling in regulatory areas?	41.7	61.5	50.0	73.8	75.0	65.6	69.4	66.6
20. are you satisfied with participation by airworthiness inspectors in safety seminars and other public meetings?	73.9	84.4	73.7	88.2	90.6	86.2	89.7	85.7
21. are you satisfied with the performance of airworthiness inspectors, assigned to you or your facility?	83.3	76.9	72.7	84.6	91.2	87.9	91.7	93.1
TOTAL NUMBER OF RESPONDENTS: N=	24	39	22	39	37	33	50	32

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APPENDIX E.-PERCENTAGES OF POSITIVE RESPONSES FOR SOUTHWEST REGION FSDOS FOR EACH ITEM IN THE SURVEY

TO WHAT EXTENT:	FSDO A	B	C	D	E	F	G	H
1. are you familiar with the FAA regulations that apply to your aviation functions?	100.0	98.0	98.0	95.3	95.8	97.5	100.0	100.0
2. are you familiar with the FAA published policies and interpretations regarding those regulations that apply to your aviation functions?	85.7	90.2	79.8	90.6	95.8	73.7	87.5	92.7
3. do those regulations policies, and interpretations give you flexibility in making decisions about the work you do?	63.0	68.0	69.4	62.3	54.2	53.8	65.8	68.5
4. are you aware of the duties and responsibilities of airworthiness inspectors?	92.6	74.0	80.8	82.8	79.2	61.5	85.0	76.4
5. are you visited during the year by airworthiness inspectors assigned to you or your facility?	78.6	51.0	54.1	57.8	54.2	72.5	57.5	61.8
6. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA regulations?	100.0	95.9	97.9	96.8	87.0	91.7	94.7	88.7
7. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA published policies and interpretations supporting the regulations?	92.0	85.1	97.8	96.7	90.9	83.3	97.3	90.2
8. do airworthiness inspectors, assigned to you or your facility, interpret the regulations in a consistent way?	80.0	71.4	83.9	75.4	56.5	67.6	86.8	73.1
9. do airworthiness inspectors, assigned to you or your facility interpret the regulations accurately?	95.7	84.0	90.3	91.8	81.8	80.6	94.7	88.9
10. do airworthiness inspectors, assigned to you or your facility explain the regulations and your options clearly?	30.8	74.0	74.0	87.3	69.6	63.2	82.5	75.5
11. are differences of opinion between you and airworthiness inspectors (regarding interpretations of regulations) resolved in mutually acceptable ways?	75.0	75.0	83.9	86.4	75.0	75.7	84.2	77.4
12. do airworthiness inspectors, assigned to your or your facility, conduct their duties in a thorough way?	96.4	82.0	91.6	95.0	75.0	81.6	97.2	88.9
13. do airworthiness inspectors, assigned to you or your facility, appear to be technically competent in the conduct of their duties?	81.5	85.4	36.6	94.9	65.2	73.7	94.9	83.0
14. are airworthiness inspectors, assigned to you or your facility, courteous in the conduct of their duties?	96.2	86.0	95.9	98.4	87.5	81.6	97.5	90.7
15. do airworthiness inspectors, assigned to you or your facility, appear to understand your organization and its needs?	76.9	71.4	86.0	83.3	66.7	56.4	92.3	81.1
16. do airworthiness inspectors, assigned to you or your facility, provide clear and accurate answers to your questions?	71.4	76.0	83.7	84.1	62.5	76.3	87.5	79.6
17. do airworthiness inspectors, assigned to you or your facility, provide answers in a timely manner?	78.6	74.0	85.7	85.9	75.0	78.9	95.0	83.3
18. do you rely on airworthiness inspectors for counseling in technical areas?	39.3	46.9	40.8	60.9	45.8	37.5	45.0	50.9
19. do you rely on airworthiness inspectors for counseling in regulatory areas?	42.9	54.2	55.1	65.6	56.5	35.0	65.0	61.5
20. are you satisfied with participation by airworthiness inspectors in safety seminars and other public meetings?	85.7	85.0	67.5	83.6	71.4	71.4	81.1	81.3
21. are you satisfied with the performance of airworthiness inspectors, assigned to you or your facility?	78.6	76.0	86.7	93.8	62.5	66.7	92.3	85.2
TOTAL NUMBER OF RESPONDENTS: N=	28	51	99	64	24	40	40	55

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APPENDIX F.--PERCENTAGES OF POSITIVE RESPONSES FOR SOUTHERN REGION FSDOS FOR EACH ITEM IN THE SURVEY

TO WHAT EXTENT:	FSDO A	B	C	D	E	F	G	H
1. are you familiar with the FAA regulations that apply to your aviation functions?	100.0	97.7	98.6	98.7	100.0	98.1	100.0	100.0
2. are you familiar with the FAA published policies and interpretations regarding these regulations that apply to your aviation functions?	33.3	86.0	85.5	92.2	87.2	82.7	82.0	78.9
3. do those regulations policies, and interpretations give you flexibility in making decisions about the work you do?	50.0	67.4	62.7	61.0	67.4	53.5	65.4	61.1
4. are you aware of the duties and responsibilities of airworthiness inspectors?	66.7	83.7	81.2	75.3	80.9	73.8	76.4	77.8
5. are you visited during the year by airworthiness inspectors assigned to you or your facility?	100.0	60.5	51.5	48.7	52.2	61.2	38.1	47.4
6. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA regulations?	33.3	97.6	92.6	97.3	93.2	98.0	96.1	88.9
7. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA published policies and interpretations supporting the regulations?	33.3	86.5	86.8	94.6	90.7	92.9	88.5	83.3
8. do airworthiness inspectors, assigned to you or your facility, interpret the regulations in a consistent way?	33.3	76.2	86.8	81.1	75.0	88.0	74.3	72.2
9. do airworthiness inspectors, assigned to you or your facility interpret the regulations accurately?	66.7	90.5	92.4	90.4	86.0	94.8	84.3	88.9
10. do airworthiness inspectors, assigned to you or your facility explain the regulations and your options clearly?	33.3	81.0	79.4	85.1	63.0	88.0	69.2	77.8
11. are differences of opinion between you and airworthiness inspectors (regarding interpretations of regulations) resolved in mutually acceptable ways?	66.7	91.9	80.3	79.5	79.5	82.1	70.5	72.2
12. do airworthiness inspectors, assigned to you or your facility, conduct their duties in a thorough way?	100.0	95.2	89.4	94.5	88.4	94.1	89.3	82.4
13. do airworthiness inspectors, assigned to you or your facility, appear to be technically competent in the conduct of their duties?	33.3	88.1	89.6	89.2	84.4	96.0	85.2	84.2
14. are airworthiness inspectors, assigned to you or your facility, courteous in the conduct of their duties?	66.7	95.2	95.7	93.2	97.8	96.1	94.5	94.7
15. do airworthiness inspectors, assigned to you or your facility, appear to understand your organization and its needs?	33.3	88.1	83.3	81.1	84.4	85.1	85.2	68.4
16. do airworthiness inspectors, assigned to you or your facility, provide clear and accurate answers to your questions?	66.7	88.1	82.6	79.7	78.3	87.0	78.0	84.2
17. do airworthiness inspectors, assigned to you or your facility, provide answers in a timely manner?	66.7	78.6	83.8	80.8	83.0	88.9	85.2	83.3
18. do you rely on airworthiness inspectors for counseling in technical areas?	33.3	48.8	50.0	45.3	25.5	55.3	49.1	36.8
19. do you rely on airworthiness inspectors for counseling in regulatory areas?	33.3	65.1	60.9	65.3	44.7	70.9	61.6	68.4
20. are you satisfied with participation by airworthiness inspectors in safety seminars and other public meetings?	50.0	80.0	80.0	81.4	80.6	82.4	79.0	93.8
21. are you satisfied with the performance of airworthiness inspectors, assigned to you or your facility?	66.7	87.8	84.1	89.3	83.0	90.2	86.2	78.9
TOTAL NUMBER OF RESPONDENTS: N=	3	43	69	77	47	104	113	19

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APPENDIX G.--PERCENTAGES OF POSITIVE RESPONSES BY GREAT LAKES REGION GADOS AND FSDOS FOR EACH ITEM IN THE SURVEY

TO WHAT EXTENT:	GADO AND FSDO											
	A	B	C	D	E	F	AA	BB	CC	DD	EE	FF
1. are you familiar with the FAA regulations that apply to your aviation functions?	98.3	100.0	97.3	96.6	100.0	100.0	100.0	97.9	97.1	100.0	100.0	100.0
2. are you familiar with the FAA published policies and interpretations regarding these regulations that apply to your aviation functions?	84.2	78.1	83.8	79.3	88.9	89.3	84.6	80.9	88.2	80.0	81.0	92.9
3. do these regulations policies, and interpretations give you flexibility in making decisions about the work you do?	63.2	53.7	43.2	60.3	74.1	53.6	46.2	52.2	51.6	53.3	52.0	50.0
4. are you aware of the duties and responsibilities of airworthiness inspectors?	82.5	75.9	81.1	81.0	88.9	89.3	76.9	70.2	72.7	86.7	72.7	71.4
5. are you visited during the year by airworthiness inspectors assigned to you or your facility?	59.6	41.5	43.2	50.0	51.9	78.6	61.5	38.0	58.8	66.7	64.9	64.3
6. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA regulations?	96.2	92.6	85.7	89.7	96.0	96.4	92.3	95.6	93.9	86.7	94.9	78.6
7. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA published policies and interpretations supporting the regulations?	96.0	90.2	82.9	82.5	91.7	100.0	92.3	78.6	93.8	86.7	89.2	78.6
8. do airworthiness inspectors, assigned to you or your facility, interpret the regulations in a consistent way?	82.0	78.8	65.7	75.9	84.0	78.6	84.6	58.1	80.0	66.7	80.8	76.9
9. do airworthiness inspectors, assigned to you or your facility interpret the regulations accurately?	93.9	90.0	78.3	85.7	87.5	85.7	84.6	85.4	96.7	78.6	92.1	78.6
10. do airworthiness inspectors, assigned to you or your facility explain the regulations and your options clearly?	83.3	78.1	58.3	79.3	84.0	67.9	76.9	77.3	77.4	66.7	80.8	57.1
11. are differences of opinion between you and airworthiness inspectors (regarding interpretations of regulations) resolved in mutually acceptable ways?	81.5	79.5	65.7	73.7	87.5	85.2	61.5	78.0	83.3	53.3	83.3	64.3
12. do airworthiness inspectors, assigned to you or your facility, conduct their duties in a thorough way?	98.1	82.7	82.4	89.5	88.0	89.3	92.3	86.4	93.5	85.7	91.1	84.6
13. do airworthiness inspectors, assigned to you or your facility, appear to be technically competent in the conduct of their duties?	86.5	82.7	82.9	80.7	84.6	8[illegible]1	100.0	88.6	84.4	80.0	83.5	78.6
14. are airworthiness inspectors, assigned to you or your facility, courteous in the conduct of their duties?	94.3	96.3	80.6	94.7	96.[illegible]	92.9	92.3	95.6	93.9	93.3	94.9	71.4
15. do airworthiness inspectors, assigned to you or your facility, appear to understand your organization and its needs?	84.9	72.2	70.6	81.0	84.6	71.4	83.3	81.0	78.1	73.3	82.3	71.4
16. do airworthiness inspectors, assigned to you or your facility, provide clear and accurate answers to your questions?	88.7	77.8	74.3	79.3	88.5	82.1	84.6	75.6	81.8	66.7	78.5	71.4
17. do airworthiness inspectors, assigned to you or your facility, provide answers in a timely manner?	75.9	79.6	77.1	79.3	92.3	96.4	91.7	82.2	80.6	80.0	86.1	71.4
18. do you rely on airworthiness inspectors for counseling in technical areas?	37.9	33.3	25.0	41.4	37.0	46.4	53.8	42.2	36.7	46.7	46.8	64.3
19. do you rely on airworthiness inspectors for counseling in regulatory areas?	69.0	55.6	55.6	50.0	48.4	64.3	69.2	56.5	56.3	66.7	61.5	64.3
20. are you satisfied with participation by airworthiness inspectors in safety seminars and other public meetings?	78.7	64.6	78.1	86.8	75.0	88.9	83.3	75.1	68.2	93.3	78.3	71.4
21. are you satisfied with the performance of airworthiness inspectors, assigned to you or your facility?	82.1	84.9	78.3	81.0	81.5	85.7	100.0	75.6	81.3	73.3	85.9	71.4
TOTAL NUMBER OF RESPONDENTS: N=	58	54	37	58	27	28	13	47	34	15	77	14

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APPENDIX E.-PERCENTAGES OF POSITIVE RESPONSES FOR EASTERN REGION
RADIO AND FSDOS FOR EACH ITEM IN THE SURVEY

TO WHAT EXTENT:	RADIO AND FSDO											
	A	B	C	D	E	F	G	H	I	J	K	L
1. are you familiar with the FAA regulations that apply to your aviation functions?	100.0	100.0	96.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.9
2. are you familiar with the FAA published policies and interpretations regarding those regulations that apply to your aviation functions?	87.5	88.6	96.3	89.6	91.4	83.7	82.4	89.4	84.3	96.3	90.9	87.0
3. do those regulations policies, and interpretations give you flexibility in making decisions about the work you do?	65.2	61.8	88.9	79.8	55.9	61.9	58.8	56.3	60.0	55.8	72.7	79.2
4. are you aware of the duties and responsibilities of airworthiness inspectors?	75.0	88.6	85.2	87.5	82.9	81.4	88.2	81.3	86.7	73.1	86.4	79.2
5. are you visited during the year by airworthiness inspectors assigned to you or your facility?	79.2	60.0	70.4	68.6	57.1	57.1	67.6	46.9	60.0	83.0	68.2	52.1
6. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA regulations?	87.5	97.1	100.0	91.7	94.3	100.0	94.1	96.7	86.7	98.0	90.9	95.6
7. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA published policies and interpretations supporting the regulations?	87.0	90.9	100.0	91.3	94.3	97.6	84.8	89.7	85.7	94.0	80.0	88.4
8. do airworthiness inspectors, assigned to you or your facility, interpret the regulations in a consistent way?	69.6	91.2	88.9	77.1	71.4	80.5	75.8	82.8	76.9	77.6	85.7	81.4
9. do airworthiness inspectors, assigned to you or your facility interpret the regulations accurately?	68.2	90.3	96.3	85.4	93.9	87.5	91.2	88.9	84.6	86.4	95.0	87.5
10. do airworthiness inspectors, assigned to you or your facility explain the regulations and your options clearly?	75.0	82.4	88.9	78.8	77.1	71.4	82.4	73.3	57.1	74.0	76.2	80.0
11. are differences of opinion between you and airworthiness inspectors (regarding interpretations of regulations) resolved in mutually acceptable ways?	79.2	81.8	100.0	89.9	85.7	71.4	83.9	75.9	78.6	78.2	80.0	68.0
12. do airworthiness inspectors, assigned to you or your facility, conduct their duties in a thorough way?	87.0	95.9	92.3	91.5	88.6	92.7	94.1	86.2	92.9	84.0	85.0	85.4
13. do airworthiness inspectors, assigned to you or your facility, appear to be technically competent in the conduct of their duties?	87.5	88.2	96.3	79.2	88.6	92.7	88.2	90.9	92.9	80.8	84.2	79.5
14. are airworthiness inspectors, assigned to you or your facility, courteous in the conduct of their duties?	87.5	93.9	100.0	97.9	97.1	97.6	94.1	96.8	92.9	90.2	100.0	95.5
15. do airworthiness inspectors, assigned to you or your facility, appear to understand your organization and its needs?	70.8	85.3	81.5	85.4	76.5	81.0	72.7	80.3	78.6	78.0	71.4	81.8
16. do airworthiness inspectors, assigned to you or your facility, provide clear and accurate answers to your questions?	83.3	88.2	92.6	83.0	82.9	88.1	82.4	90.3	86.7	78.5	76.2	88.0
17. do airworthiness inspectors, assigned to you or your facility, provide answers in a timely manner?	75.0	93.9	96.3	79.2	85.7	88.1	85.3	77.4	80.0	78.4	90.9	84.4
18. do you rely on airworthiness inspectors for counseling in technical areas?	41.7	48.0	55.6	35.4	51.4	59.8	47.1	51.6	53.3	40.4	45.5	52.2
19. do you rely on airworthiness inspectors for counseling in regulatory areas?	58.3	57.1	74.1	62.5	57.1	50.0	70.6	74.2	26.7	55.8	63.6	65.9
20. are you satisfied with participation by airworthiness inspectors in safety seminars and other public meetings?	75.0	84.4	81.5	69.8	84.4	76.5	83.9	77.8	91.7	68.2	83.3	73.5
21. are you satisfied with the performance of airworthiness inspectors, assigned to you or your facility?	83.3	90.9	92.6	81.3	91.4	90.5	91.2	90.3	93.3	78.8	72.7	81.8
TOTAL NUMBER OF RESPONDENTS: N=	24	35	27	48	35	43	34	32	15	53	22	48

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APPENDIX I.--PERCENTAGES OF POSITIVE RESPONSES PER REGION-PACIFIC GROUP
Filled for each item in the survey

TO WHAT EXTENT:	A	B	C	D	E	F	G	H	I	J	K	L	M	P
1. are you familiar with the FAA regulations that apply to your aviation functions?	94.2	97.0	100.0	100.0	100.0	100.0	95.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2. are you familiar with the FAA published policies and interpretations regarding these regulations that apply to your aviation functions?	80.1	91.2	88.9	88.9	88.2	85.7	79.5	85.7	84.6	88.8	92.6	75.0	90.0	88.9
3. do these regulations policies, and interpretations give you flexibility in making decisions about the work you do?	68.8	75.0	66.6	77.8	64.7	42.9	58.6	61.9	76.9	88.8	73.3	85.0	72.7	72.7
4. are you aware of the duties and responsibilities of airworthiness inspectors?	88.8	87.5	77.8	82.4	76.5	71.4	88.7	85.7	46.2	75.0	93.3	70.6	80.6	95.5
5. are you visited during the year by airworthiness inspectors assigned to you or your facility?	49.2	61.8	88.8	72.2	58.8	57.1	65.5	61.9	69.2	38.8	93.3	85.0	53.8	72.7
6. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA regulations?	96.1	100.0	87.5	82.4	94.1	85.3	100.0	95.2	92.3	88.8	100.0	100.0	92.3	90.9
7. do airworthiness inspectors, assigned to you or your facility, appear to know the FAA published policies and interpretations supporting the regulations?	93.9	90.6	87.5	70.6	88.2	83.3	100.0	90.5	76.9	88.8	100.0	94.7	90.0	86.7
8. do airworthiness inspectors, assigned to you or your facility, interpret the regulations in a consistent way?	77.1	78.6	62.5	70.6	76.5	33.3	75.6	81.0	61.5	88.8	86.7	66.8	72.7	66.7
9. do airworthiness inspectors, assigned to you or your facility, interpret the regulations accurately?	91.7	96.3	62.5	76.5	81.3	50.0	88.6	85.8	76.9	87.5	100.0	100.0	75.0	88.8
10. do airworthiness inspectors, assigned to you or your facility explain the regulations and your options clearly?	86.8	87.6	87.5	77.8	76.5	87.6	86.8	85.7	76.9	86.7	87.5	85.8	90.3	86.7
11. are differences of opinion between you and airworthiness inspectors (regarding interpretations of regulations) resolved in mutually acceptable ways?	68.2	81.8	57.1	70.6	86.6	66.7	89.3	80.8	61.5	77.8	100.0	89.5	66.7	71.8
12. do airworthiness inspectors, assigned to you or your facility, conduct their duties in a thorough way?	90.8	96.8	88.7	94.1	88.8	83.3	89.9	100.0	84.6	88.8	100.0	100.0	80.6	86.6
13. do airworthiness inspectors, assigned to you or your facility, appear to be technically competent in the conduct of their duties?	88.3	91.8	87.1	76.8	76.8	86.8	86.7	85.8	77.9	86.8	100.0	100.0	84.6	77.8
14. are airworthiness inspectors, assigned to you or your facility, courteous in the conduct of their duties?	96.8	96.1	88.8	88.8	94.1	100.0	96.6	100.0	92.3	100.0	100.0	100.0	92.3	95.8
15. do airworthiness inspectors, assigned to you or your facility, appear to understand your organization and its needs?	71.8	87.6	88.8	76.8	88.8	66.8	79.3	90.8	61.5	86.8	87.5	85.8	76.8	77.8
16. do airworthiness inspectors, assigned to you or your facility, provide clear and accurate answers to your questions?	76.8	79.8	66.8	88.8	76.5	33.3	79.3	80.8	69.2	86.8	87.5	95.8	69.2	81.8
17. do airworthiness inspectors, assigned to you or your facility, provide answers in a timely manner?	87.8	84.7	66.7	88.8	88.8	33.3	86.8	90.8	84.6	77.8	93.8	88.8	61.5	81.8
18. do you rely on airworthiness inspectors for counseling in technical areas?	32.7	38.8	88.8	66.8	47.1	88.1	51.7	71.8	38.5	66.8	86.3	66.8	38.5	45.5
19. do you rely on airworthiness inspectors for counseling in regulatory areas?	66.2	61.8	38.8	66.8	76.8	66.8	86.8	85.8	69.2	66.8	81.3	76.8	46.2	68.1
20. are you satisfied with participation by airworthiness inspectors in safety seminars and other public meetings?	75.8	81.8	66.7	76.8	81.3	66.8	86.8	86.8	66.8	100.8	100.8	84.7	76.8	72.8
21. are you satisfied with the performance of airworthiness inspectors, assigned to you or your facility?	76.8	76.8	66.7	76.8	86.8	33.3	86.8	81.8	76.8	86.8	81.8	86.8	84.6	77.8
TOTAL NUMBER OF RESPONSES: N=	52	34	9	18	17	7	29	21	13	16	15	20	13	22

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